

# 1 EC-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially  
Explosive Atmospheres - Directive 94/9/EC**

3 **EC-Type Examination Certificate No:** FM15ATEX0038X

4 **Equipment or protective system:  
(Type Reference and Name)** Series HX  
Valve Position Sensor

5 **Name of Applicant:** StoneL

6 **Address of Applicant:** 26271 US Hwy 59  
Fergus Falls MN 56537  
United States

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Ltd, notified body number 1725 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3054431 dated 30<sup>th</sup> October 2015

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN60079-0:2012+A11:2013, EN60079-1:2007, EN60079-31:2009

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EC-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 2 G Ex db IIC T5 Ta = -40 °C to +80 °C Gb  
II 2 G Ex db IIC T6 Ta = -40 °C to +65 °C Gb  
II 2 D Ex tb IIIC T100°C Ta = -40 °C to +80 °C Db  
IP66 / IP68

See Section 13 for specific applicability

See also FM15ATEX0045X for Series HX with Type of Protection "i"

**Mick Gower**  
Certification Manager, FM Approvals Ltd.

Issue date: 02<sup>nd</sup> November 2015

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS  
T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: [atex@fmaprovals.com](mailto:atex@fmaprovals.com) [www.fmaprovals.com](http://www.fmaprovals.com)

## **SCHEDULE**

to EC-Type Examination Certificate No. FM15ATEX0038X

### 13 **Description of Equipment or Protective System:**

**General** - The Hawkeye Series HX Magnetic Proximity Sensor is intended for point sensing in an explosive atmosphere. The sensing head triggers on a magnetic target at distances up to 4-6 mm, depending on target material.

**Construction** - The sensor body is machined from 316 stainless steel.

**Field Wiring** – For the Level of Protection “db”, “ia”, and “tb” models, an integral cable is provided and exits the enclosure via a Cooper Capri cable gland, Type ADE1N0502SSS.

**Gaskets and Seals** – Silicone seals in the cable gland, rated -60°C to +140°C, are employed to provide IP66 / IP68 (3 m / 48 h) ingress protection.

The specific models described by this Certificate are as follows:

#### **HXaT03Se-xxx. Valve Position Sensor.**

a = Function 35 or 45.

e = Branding A or M.

xxx = Options “Special Unit Digits”

Note: ‘Special Unit Digits’ do not affect the integrity of the housing, the electrical safety, or the title plate.

### 14 **Specific Conditions of Use:**

- 1 The integral supply cable shall be mechanically protected and terminated in a suitable terminal or junction facility.
- 2 Using the box provided on the HX45T03 nameplate, the user shall permanently mark the Type of Protection chosen for the specific installation. Once the Type of Protection has been marked it shall not be changed.
- 3 The earth bonding connection shall be maintained by either the external mounting thread and/or the earthing wire of the integral cable.

### 15 **Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

## **SCHEDULE**

to EC-Type Examination Certificate No. FM15ATEX0038X

**16 Test and Assessment Procedure and Conditions:**

This EC-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

**17 Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

**18 Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
02 <sup>nd</sup> November 2015	Original Issue.

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

# Blueprint Report

**StoneL Corporation (1000001486)**

**Class No IEC**

**Original Project I.D. 3054432**

**Certificate I.D. FM15ATEX0038X**

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
000191	A	Schedule Documents, Hawkeye, HX series, ATEX-IECEX Ex d-Ex t	3054431	Yes (pdf)
000192	A	Model Description, Hawkeye, HX series, ATEX-IECEX Ex d-Ex t	3054431	Yes (pdf)
105342	A	Electrical Information, Hawkeye, HX series	3054431	Yes (pdf)
105347	A	Enclosure Information, Hawkeye HX series	3054431	Yes (pdf)
105348	A	IMO - HX series, Installation Instructions	3054431	Yes (pdf)
105359	A	Installation Addendum, Hawkeye HX ATEX	3054431	Yes (pdf)
105391	A	Product Marking, Hawkeye, HX Series ATEX-IECEX	3054431	Yes (pdf)
200181	E	Schematic, HX 35 SST	3054431	Yes (pdf)
200182	E	Schematic, HX Sensor	3054431	Yes (pdf)
200226	C	Schematic, HX 45 Namur	3054431	Yes (pdf)
417317	A	Cable, Bulk, 18 AWG 3 Conductor Black, Black, Green	3054431	Yes (pdf)
417318	A	Cable, Bulk, 18 AWG 3 Conductor Blue, Brown, Green	3054431	Yes (pdf)
418371	E	PCB, HX 35 SST Unpopulated	3054431	Yes (pdf)
418372	E	PCB, HX 35 SST Populated	3054431	Yes (pdf)
418373	E	PCB, HX Sensor Unpopulated	3054431	Yes (pdf)
418374	E	PCB, HX Sensor Populated	3054431	Yes (pdf)
418425	C	PCB, HX 45 Namur Unpopulated	3054431	Yes (pdf)
418426	C	PCB, HX 45 Namur Populated	3054431	Yes (pdf)
432021	A	Potting, Stycast 2651 w/ Catalyst 9	3054431	Yes (pdf)
432038	A	Urethane potting, Epic Resins D9970 clear, mixed	3054431	Yes (pdf)
434380	A	Cable Gland, XP, Ex d 1/2 NPT Stainless Steel	3054431	Yes (pdf)